



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
<http://dnr.state.il.us>

Pat Quinn, Governor
Marc Miller, Director

September 22, 2014

Scott Twait
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, IL 62794-9276

RE: Exelon Alternative Thermal Effluent Limitations
IDNR Project # 1500588
Rock Island County

Dear Mr. Twait:

This letter concerns the Endangered Species Consultation for Alternative Thermal Effluent Limitations. This project was submitted for consultation in accordance with the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], and the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17].

Exelon is requesting the following alternative thermal effluent limitations:

- Allow the water temperature at representative locations in the main river to exceed the maximum limits as stated in the table at 35 Ill. Adm. Code 303.331 by no more than 3 degrees Fahrenheit for 2.5 percent of the hours in a calendar year which works out to 219 excursion hours.
- Allow the water temperature at representative locations in the main river to exceed the maximum limits as stated in the table at 35 Ill. Adm. Code 303.331 by no more than 5 degrees Fahrenheit during the months of July, August, and September for no more than 1.5 percent of the hours in a calendar year which works out to 131.4 excursion hours of the total 219 excursion hours.
- Remove the requirement for exceedances of the maximum limits as stated in the table at 35 Ill. Adm. Code 303.331 to be limited to a rolling 12-month period and instead allow the exceedances to be per calendar year.
- Allow the area and volume in which mixing occurs to extend up to 34% of the cross-sectional area or volume of flow in the Mississippi River allowing for a 66% zone of passage for aquatic life.

Several listed species occur in the vicinity of the discharge — the state and federally-endangered Higgins Eye (*Lampsilis higginsii*) and Sheepnose (*Plethobasus cyphus*), and the state-threatened Black Sandshell (*Ligumia recta*) and Butterfly (*Ellipsaria lineolata*). This stretch of the river is also listed on the Illinois Natural Areas Inventory (Mississippi River – Cordova) because it has suitable habitat for state-listed species.

Based on studies and data it has reviewed, the Department recommends that the alternative effluent limitations not be approved. The proposed effluent approaches the upper temperature thresholds for the listed mussel species at some point in their life cycle. Past excursions appear to be happening at times

when sensitive mussel life history stages are likely present in the river. Take is likely and may threaten the long term viability of the species in this bed, especially if ambient river temperatures continue to rise.

If the alternative effluent limitations are approved, the Department recommends that Exelon apply for Incidental Take Authorization for Higgins Eye (*Lampsilis higginsii*), Sheepnose (*Plethobasus cyphus*), Black Sandshell (*Ligumia recta*), and Butterfly (*Ellipsaria lineolata*) in accordance with 17 Ill Adm. Code Part 1080. Communication concerning the ITA application should be directed to Jenny Skufca, Office of Resource Conservation, 217-557-8243 or Jenny.Skufca@illinois.gov.

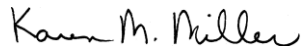
In accordance with 17 Ill. Adm. Code 1075.40(h), please notify the Department of your decision regarding these recommendations.

The consultation under 17 Ill. Adm. Code Part 1075 is terminated. This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Sincerely,



Karen M. Miller
Impact Assessment Section
Phone (217) 785-5500

CC: Jeremiah Haas, Exelon Corp.